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A DOLLARIZATION BLUEPRINT FOR ARGENTINA

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Executive Summary

President Carlos Menem of Argentina has advocated replacing the Argentine peso with the dollar. Dollarization would benefit Argentina because it would eliminate the peso-dollar exchange-rate risk, lower interest rates, and stimulate economic growth.

Argentina's currency board system--under which the peso trades at a fixed one-to-one rate with the dollar and is convertible on demand--has produced currency stability and helped that country achieve free-market reforms and high growth. However, the currency board is not orthodox, a factor that heightens uncertainty and undermines confidence in the peso.

The empirical evidence shows that developing countries without their own central banks have not suffered from a lack of monetary flexibility and have in fact had higher growth rates and no greater incidence of or vulnerability to external shocks than other countries. Argentina should unilaterally dollarize its economy without entering into a treaty with the United States. Access to the Federal Reserve's discount window is unnecessary and undesirable for Argentina. Other mechanisms already exist to supply emergency liquidity.

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Introduction

In the months leading up to the Brazilian government's decision to devalue and then float the real in January 1999, the Argentine peso also came under speculative attack, though much milder than that which the real experienced. After the real was devalued, there was increased speculation that Argentina would devalue the peso. In fact, despite the good record of Argentina's currency board-like system since it was established in April 1991,[1] there has often been speculation that the currency would be devalued.[2] Interest rates in pesos have accordingly been persistently higher than interest rates in U.S. dollars within Argentina.

During the past year, the spread between interest rates on Argentine 30-day loans in pesos and dollars has varied between 50 and 440 basis points. And as of late January 1999, the average rate for overnight interbank loans was about 7.5 percent a year for pesos, compared with about 6.5 percent for dollars. For one-year interbank loans, the late-January 1999 interest rates were about 19.75 percent for pesos and 14.75 percent for dollars.

To reduce and ultimately eliminate speculation about devaluation, the Menem government, on January 21, 1999, announced that it intended to dollarize. The government is now considering the precise form of dollarization and the schedule for dollarizing.

Argentina is already dollarized in an unofficial or even semiofficial sense. Dollar deposits in Argentine banks exceed peso deposits, loans can be made in dollars, and it is legal to use the dollar alongside the peso. When we speak of dollarization here, we mean full, official dollarization. Under official dollarization, all peso notes (paper money) and coins would be replaced by dollars, and all peso assets, liabilities, and prices would be converted into dollars at the current exchange rate of 1 dollar = 1 peso. Argentina's monetary system would become like those of Panama,[3] the best-known dollarized system today, and the 27 other countries and dependent territories that use only foreign currencies.

It would be possible for President Carlos Menem to enact dollarization by decree, something he threatened to do in 1995. However, his successor, to be elected later this year, could just as easily end dollarization by decree. Dollarization would be more durable if it were enacted into law by the Argentine congress and had wide popular approval. To assist in the debate about dollarization, we offer an

analysis of how Argentina's currency board-like system has worked, arguments about why dollarization is desirable, and a blueprint to implement the form of dollarization that we think would be best.

Argentina's Monetary System Is Currency Board-like, Not an Orthodox Currency Board System

Argentina does not have a pure, orthodox currency board system; rather, it has an unorthodox, currency board-like system.[4] Argentines call the system, and the wider economic reforms it has spurred, "convertibility," an uncommon term for an unusual system. The system has some peculiar features that many observers neglect.

The Convertibility Law (Law 23,928), which established the system, was introduced as a bill in the Argentine congress on March 20, 1991. The Congress passed the bill and President Menem signed it on March 27; its provisions took effect on April 1. The law established a selling rate of 10,000 australes per U.S. dollar. As of January 1, 1992, Argentina introduced the peso at a rate of 1 peso = 10,000 australes = 1 dollar (Decree 2,128 of 1991). The central bank must hold freely available reserves of at least 100 percent of the monetary base (money in circulation plus sight deposits of financial institutions with the central bank). Reserves can be in the form of deposits, other interest-bearing instruments, and Argentine or foreign government bonds; the Convertibility Law itself does not specify any limits on holdings of Argentine bonds. Reserves must be payable in gold, precious metals, U.S. dollars, or other foreign currencies of similar quality. The law requires reserves to be assessed at their market value. Reserves against the monetary base cannot be used or pledged for any other purpose. The law defines the monetary base as local money in circulation (notes and coins) plus local-currency sight deposits of financial institutions at the central bank.

A revised Organic Law of the Banco Central de la República Argentina (BCRA) was approved on September 23, 1992 (Law 24,144). It brought the central bank statute more into conformity with the spirit of the Convertibility Law. The revised law states that the primary mission of the central bank is to preserve the value of the currency, with the supervision of financial markets included as one of the secondary missions. The law also establishes the central bank's independence from the executive branch in formulating monetary policy. However, the central bank’s directors are

appointed by the president in consultation with the congress. (Four of the eight directors have six-year terms that expire on September 23, 2001, and the other four have six-year terms that expire on September 23, 2004.)

The central bank law prohibits the central bank from lending to or guaranteeing loans of any level of the Argentine government or government nonfinancial enterprises. However, the central bank may hold part of its reserves against the monetary base in Argentine government bonds. Until September 23, 1995, the limit was 20 percent of reserves; since then, the limit has been 33.33 percent. (The increase in the limit was not connected with the Tequila crisis of 1995. It had been written into the central bank law in 1992.) A separate limitation is that the central bank cannot increase its holdings of Argentine public bonds more than 10 percent from the average of the previous year. For example, if average holdings this year are 1 billion pesos, average holdings next year cannot exceed 1.1 billion pesos. However, upon notifying the congress, the directors of the central bank can, as an extraordinary measure, declare a temporary period of no more than 90 days during which the 10 percent year-over-year increase would not apply. In that case, the central bank could hold Argentine government bonds up to the maximum of 33.33 percent for a 90-day period.

The reserves of the central bank not held as Argentine government bonds are called the liquid reserves (in Spanish, reservas de libre disponibilidad). They have never fallen below 80 percent of the monetary base, and the central bank has not availed itself of the provision suspending the 10 percent year-over-year increase in Argentine government bonds. As of late January 1999, the monetary base was almost 15 billion pesos, and the liquid reserves exceeded $24 billion. (Note that of the total liquid reserves, almost $8 billion represents commercial bank reserve requirements, or what the Argentines call "liquidity requirements." They are held on deposit in foreign banks.)

In principle, anyone can exchange pesos for dollars with the central bank, but in practice, only banks have done so. The Convertibility Law established a selling rate of 10,000 australes (= 1 peso) per dollar, but no buying rate. Initially, the central bank set its buying rate daily in accord with market rates, at a rate not less than 9,970 australes (= 0.9970 pesos) per dollar. Over time, the central bank gradually increased the buying rate, until on January 12, 1995, the spread between the buying and selling

rates disappeared (BCRA Communication "A" 2298, January 12, 1995).

When the Convertibility Law took effect, the central bank had a large inherited portfolio of domestic assets. Those assets and the corresponding liabilities were separated from the reserves established by the Convertibility Law to back the monetary base and have diminished over time as the loans have been repaid.

To complement the Convertibility Law, the government has deregulated and opened the financial system significantly. Since 1994, foreign financial institutions have been able to compete equally with Argentine ones (Decree 146, January 31, 1994). In consequence, the banking system has become much more internationalized. In December 1994, foreign banks operating in Argentina accounted for 16.5 percent of total system deposits and 25.6 percent of the deposits in private banks. By June 1998, foreign banks accounted for 40.9 percent of the system's deposits and 63.5 percent of the deposits in private banks.[5] That has dramatically facilitated the access to liquidity provided by international capital markets.

After suffering during the Tequila crisis of 1995, the poorly managed banks formerly owned by provincial governments began privatization, and the banking system consolidated. In December 1994, there were 235 banks; by June 1998, that number had been reduced to 174.

The Convertibility Law, in effect, prevents the central bank from printing money to bail out government-owned banks as it had often done before. The Organic Law of the central bank prohibits it from lending to financial institutions in distress except in cases of temporary illiquidity. Originally the central bank was allowed to lend no more than the value of an institution's capital and to make loans for no more than 30 consecutive days, although those provisions were relaxed in early 1995 to allow more emergency lending. Because the central bank has limited powers as a lender of last resort, financial institutions have had to rely mainly on their own astute management and on financial markets for liquidity, rather than evade market discipline by borrowing from the central bank.

The Central Bank's Liquidity Policies

Even though the lender of last resort is limited, it has motivated speculation against the peso. In 1995, for

example, speculators increased their short positions in pesos when the central bank extended more liquidity to illiquid, but solvent, banks. This throws into doubt the alleged benefits and rationale of the lender of last resort feature of the convertibility system.[6]

In an effort to avoid a repeat of the 1995 liquidity crisis, the central bank adopted a formal "liquidity policy" in December 1996. The key provision of the policy was the establishment of a Contingent Repurchase Facility.[7] Under this program, the Argentine central bank has the option to sell certain domestic assets for dollars to a group of banks, subject to a repurchase clause. As of October 1998, 14 international banks were participating in the Facility. The assets underlying the repo included U.S.$6.2 billion in Argentine U.S. dollar-denominated bonds and up to U.S.$500 million in dollar-denominated Argentine mortgages. The average maturity of the Facility is three years, with a clause that extends the life of the program by three months and is renewed every three months. The Contingent Repo option can be exercised at any time during the life of the program, and the maturity of the repo may begin on that date and run through the end of the program. The only event that invalidates the agreement is default by Argentina on any international debt commitment.

The Contingent Repo Facility contains several provisions to protect the lending banks. First, the program is overcollateralized. Argentine bonds must be posted with a market value at least 25 percent greater than the actual funds delivered. Second, if the prices of those bonds decline by more than 5 percent, additional bonds must be deposited as "margin" to maintain the overcollateralization minimum of 25 percent.

The costs of the liquidity protection provided by the program are modest. The option premium, or commitment fee, is 32 basis points, and the cost of funds implicit in the repo agreement is roughly LIBOR (London Interbank Offer Rate) plus 205 basis points.

Importantly, the Contingent Repo Facility is not a lender of last resort-like arrangement resting on the power to inflate. On the contrary, it is a commercial borrowing facility between the central bank and the commercial banking sector. Although the end of the Argentine crisis of 1995 was largely attributable to the $7 billion multilateral bailout, the $6.7 billion Contingent Repo Facility illustrates that the same kind of funding also can be secured

without a lender of last resort that has the capacity to print money.

In 1995, the government helped establish the privately financed Fondo de Garantía de los Depósitos. (Since 1992 there had been no government deposit insurance.) The fund insures peso and foreign-currency deposits with maturities less than 90 days up to 10,000 pesos and deposits with maturities longer than 90 days up to 20,000 pesos. Deposits that pay interest more than two percentage points over the rate for the same term paid by the government-owned Banco de la Nación are not covered (Decree 540, April 12, 1995). Member banks are required to make basic monthly payments of 0.03 percent of their average daily deposits and an amount up to 0.03 percent more, depending on the riskiness of their assets. The central bank may allow banks to reduce or suspend the payments when the fund reaches 2 billion pesos or 5 percent of total bank deposits. The fund is administered by Seguros de Depósitos S.A., an organization owned mainly by member institutions, with a small amount of government ownership.

Before the Convertibility Law, the purpose of reserve requirements (which paid no interest) was to collect an inflation tax from banks and bank depositors. Today, their purpose is instead to protect depositors. Since the end of 1995, reserve requirements, which are called liquidity requirements, are more uniform than before and do not discriminate between pesos and dollars or against checking accounts. Liquidity requirements are currently just over 20 percent of the deposit base. The law prohibits the central bank from paying interest on reserve requirements. But since it is required that these reserves be held in foreign banks, they receive a market rate of interest. In consequence, reserve requirements in Argentina do not serve as an implicit tax on banks or bank depositors.

Because the central bank has limited powers to lend to commercial banks, the government has emphasized that commercial banks need a strong capital base. Minimum capital requirements, which were about 3 percent in mid 1991, were increased by stages and are now 11.5 percent. That compares with an international standard under the Basle Agreement of 8 percent. Capital is weighted according to the riskiness of a bank's assets, and Argentina's standards for calculating minimum capital are stricter than those of the Basle Agreement.

To generate confidence in the peso, the government has given the U.S. dollar, previously a widely used unofficial

currency, equal legal tender status with the peso. In December 1989, banks in Argentina were allowed to accept foreign-currency deposits (Law 23,578). Since then, the government has eliminated restrictions on foreign currency to the point that Argentina now has one of the world's most liberal systems. Dollars are legal tender along with pesos, and contracts can be made with equal freedom in either currency. Indeed, Argentina has a "bimonetary" system. Lending and borrowing are equally easy in either currency, and banks hold required reserves exclusively in dollars (BCRA Communication "A" 2298).

Deviations from Orthodoxy

Argentina's currency board-like system differs from an orthodox currency board in several ways, as do the currency board-like systems of Estonia (established in 1992), Lithuania (1994), Bulgaria (1997), and Bosnia (1998).[8] An orthodox currency board system has no central bank and no room for discretionary monetary policy. Argentina's monetary system, in contrast, has a central bank that has some room for discretionary monetary policy, though much less than most central banks.

The central bank is allowed to hold foreign reserves equal to a minimum of 66.66 percent of the monetary base, rather than 100 percent, as an orthodox currency board.

Although the Convertibility Law defines the monetary base, neither it nor the central bank law defines the categories "monetary liabilities" or "financial liabilities," which can include domestic assets. An orthodox currency board would have no financial liabilities other than the monetary base.

The central bank faces no maximum reserve ratio, so it can accumulate excess reserves and use them in a discretionary fashion. Although many orthodox currency boards have accumulated additional reserves of 5 percent to 15 percent in excess of the 100 percent standard, their "excess" reserves have been intended to protect the currency boards in case the securities they held lost value. Moreover, their excess reserves have been subject to rules preventing them from being used in discretionary fashion.

The exchange rate of the peso has a floor but no ceiling. In principle, therefore, the government could appreciate the peso against the dollar, though in practice it is unlikely. For an orthodox currency board, in contrast, the

floor and the ceiling are the same, or nearly the same, allowing a margin for commission fees that has usually been no more than 1 percent.

The central bank has three major instruments of discretionary monetary policy: reserve requirements, repurchases, and foreign-currency dealing. Reserve requirements are entirely within the discretion of the central bank, because statute law sets no minimum or maximum. Repurchases (repos) enable the central bank to lend to commercial banks and to influence short-term interest rates. It can undertake repurchase operations, and buy or sell foreign currency on its own initiative, if its reserves exceed the minimum established by the Convertibility Law, as they have from the start. The central bank has used repos and excess foreign reserves to smooth short-term fluctuations in interest rates and to intervene in the foreign-exchange market, but until the Tequila crisis it tried to have repos net out to zero month by month.[9] An orthodox currency board, in contrast, has no instruments of discretionary policy.

Foreign investors may repatriate their investments in Argentina at any time (Decree 1,853, September 2, 1993). A law of 1993 abolished the president's power to impose capital controls by decreeing a payments emergency (Law 21,382, Article 14). When the Convertibility Law took effect, capital controls nominally existed, but the central bank granted all requests for capital movements and allowed registration of capital movements to lapse, even before 1993.

Changing the Convertibility Law would require an act of the Argentine congress. Only a simple majority would be required if the president agreed to the changes, but to overturn a veto by the president would require a two-thirds majority of both houses of congress. The Convertibility Law is popular across the political spectrum. To their credit, President Menem and officials of the central bank have followed the spirit of the Convertibility Law and have left most of the loopholes in the current system unexploited. However, future presidents and officials of the central bank may not be so full of the spirit of the law.

Because Argentina's system is not an orthodox currency board system, Argentina has experienced some problems that have generally not occurred in orthodox currency board systems. The most serious problems occurred in the 1995 Tequila crisis, which we will not discuss at length, because it has already been analyzed in depth elsewhere.[10] On the other hand, orthodox currency board systems and dollarized

systems have had the same type of success as Argentina's currency board-like system in avoiding devaluations, maintaining full convertibility into the anchor currency, restricting inflation, limiting fiscal deficits, and encouraging economic growth. Central banking systems in Argentina and other developing countries have not had the same success.[11] The success of Argentina's convertibility system is, therefore, mainly attributable to its currency board features, while its problems are due to the central banking features that remain mixed into the system.

Dollarization Is Desirable

Because Argentina does not have an orthodox currency board and has been unwilling to make the system orthodox, as we have advocated,[12] dollarization is desirable. A dollarized monetary system works almost just like an orthodox currency board system. The main difference is that under dollarization a country loses seigniorage (the profit from issuing the monetary base) to the United States; whereas, under an orthodox currency board, it retains the profit. Let us now consider the costs and benefits of dollarization compared with Argentina's currency board-like system.

The main cost of dollarization would be lost seigniorage. At present, Argentina earns perhaps 750 million pesos a year in seigniorage. Since the size of Argentina's economy, as measured by gross domestic product (GDP), is roughly 340 billion pesos, seigniorage is only about 0.22 percent of annual GDP. In other low-inflation countries, the seigniorage can be as much as 1 percent. Argentina's long history of inflation before the Convertibility Law has made Argentines less willing to hold local notes and coins than people in other countries with low inflation, so seigniorage in Argentina is lower than average. Since the peso-dollar exchange rate is 1 to 1, there would be almost no one-time costs associated with converting computer programs and cash registers from pesos to dollars. In consequence, the administrative costs of dollarizing Argentina would be very small.

The major benefit of dollarization would be reduced interest rates in Argentina. With no peso-dollar exchange rate, currency risk would be eliminated, and the spread in interest rates between pesos and dollars for loans within Argentina would be closed. As we have mentioned, as of late January 1999 the interest rate for overnight interbank loans in pesos was about 1 percentage point higher than the rate in dollars, with the spread widening to about 5 percentage

points for one-year interbank loans. For nonbank borrowers, the spreads are higher. It is true that people who want to pay lower interest rates can borrow in dollars, but that exposes them to a currency risk that many do not wish to take, given Argentina's long history of devaluations before the Convertibility Law was passed.

By eliminating currency risk, dollarization would reduce interest rates. In consequence, Argentina's trend rate of growth would be higher and the variability of annual growth would be lower with dollarization than with its currency board-like system. Indeed, a government memorandum estimates that lower interest rates resulting from dollarization would add two percentage points to the trend rate of economic growth.[13] That benefit exceeds the cost of seigniorage lost (0.22 percent of GDP).

Even using the conventional benefit-cost framework, as we have just done, leads us to conclude that the benefits of dollarizing Argentina clearly outweigh the costs. However, when evaluating alternative monetary regimes, conventional benefit-cost analysis fails to capture important benefits and costs, namely the wants of consumers. The "consumers" of money are those who use it--almost everyone except young children. Rather than using as their starting point a determination of what characteristics consumers find desirable in money, economists simply assume that a well-intentioned, competent, politically independent central bank would produce the best outcome, and that is where they begin their calculations. In the case of Argentina, that is as unrealistic as assuming that a government-owned telephone monopoly would produce efficient, low-cost service.

Argentines have shown that the characteristics they want in a currency are those that the dollar has: low inflation, full convertibility, the prospect of continued good performance in the future, and international acceptability. The Convertibility Law succeeded where past monetary reforms had failed because it made the peso a close substitute for the dollar. However, the dollar is still perceived by consumers as being superior to the peso. Dollarization would allow consumers fully to take advantage of the perceived superiority of the dollar. Government officials have on a number of occasions said that the reserves backing the peso should be considered the property of holders of the peso monetary base, held in trust by the central bank. That is a commendable attitude, but one that consumers do not fully believe. Dollarization would privatize the reserves by distributing them to the Argentine people who hold peso notes and coins. Any doubts that consumers might have about

their peso property rights and the durability of the 1-to-1 peso-dollar exchange rate would be eliminated.

Most Objections to Dollarization Are Incorrect

Argentina is not the only place where there has recently been public debate about dollarization. It has also been debated in Hong Kong.[14] People have already made several objections to dollarization in Argentina; other objections that have been made in Hong Kong may soon be repeated in Argentina. Most of the objections are mistaken. We will examine the more important ones here.

The most passionate objection to dollarization is not economic, but political. That should not come as a surprise: the choice of alternative monetary regimes always contains political elements. The political aspects can be international and pervasive, as they were last year in Indonesia, when President Suharto embraced the currency board idea. Indeed, the currency board debate in Indonesia was, to a large extent, politically motivated. In consequence, the critiques of an Indonesian currency board were based neither on facts nor on sound economic analysis.[15]

Some Argentines consider that the peso is an essential symbol of Argentina, and think that dollarization would infringe on Argentina's sovereignty. However, the several dollarized countries that are independent do not find that dollarization constrains their independence or that a locally issued currency is essential to sovereignty or to national pride; neither would Argentina. Dollarization should not be considered a blow to national pride. Rather, it is a logical extension of the principles underlying the Convertibility Law.

Under a currency board (or a monetary union), a nation gives up monetary-policy sovereignty. The same is true under dollarization. When compared with a monetary union, however, the great advantage of a currency board or dollarization is that political sovereignty is not lost, because a nation can unilaterally enter or exit a currency board or a dollarized system. In practice, that is not the case with a monetary union. Once a nation enters a monetary union, political sovereignty is given up because it is extremely difficult to unilaterally exit a monetary union.

The claim that a national currency is a symbol of sovereignty also inappropriately mixes political concepts with economic ones. National sovereignty is the ability of

a national government to have some freedom of action in foreign policy and other international political matters without being subject to coercion by other nations; it is not the ability of a government to restrict the political or economic freedoms of its citizens. In a market economy, the fundamental concept is not national sovereignty, but individual freedom of choice. The economist W. H. Hutt coined the term "consumer sovereignty" in 1934 to express that idea.

By introducing a currency board-like system, Argentina enhanced consumer sovereignty and transformed the country into one of the world's economically free and fastest-growing economies in the 1990s. Indeed, as a result of convertibility, Argentina's economic freedom ranking has improved more than any other country in the world in the 1990s, moving from 59th in 1990 to 7th in 1997.[16] Now only Hong Kong, Singapore, New Zealand, the United States, the United Kingdom, and Canada rank above Argentina. Dollarization would further solidify and enhance consumer sovereignty in Argentina.

The most frequent economic objection to dollarization is that it would deprive Argentina of flexibility in monetary policy, even the limited flexibility of its currency board-like system. The critics assert that dollarization would rob Argentina of the means to cope with external shocks, because the monetary authority would lack flexibility and room for discretionary policy. This objection is a neat theory, but it is contradicted by the empirical evidence. Annual growth rates in developing countries without monetary flexibility--those with currency boards or dollarized systems--were over 50 percent greater than in those with central banks and monetary flexibility during the 1950-93 period. Furthermore, the variability of those growth rates, as measured by their standard deviations, was virtually identical, indicating that a lack of monetary flexibility did not result in a greater incidence of or vulnerability to external shocks.[17]

A related objection is that Argentina would be hurt if the dollar someday becomes an unstable currency with high inflation. The solution to that potential problem is to extend the considerable freedom that already exists for people in Argentina to use any currency. Though initially the dollar would be the most widely used currency, people would be free to use whatever currency they wish. If people wish to make contracts specifying payment of wages, business expenses, or loans in euros, yen, or even Brazilian reals,

let them do so. That way, people would be able to use the most stable currencies in the world if they wish.

Some economists have claimed that Argentina is not part of an "optimum currency area" with the United States, because the economic forces affecting the two countries are different. According to them, dollarizing Argentina would hurt it by preventing the government from ever using the exchange rate as a tool of monetary policy. We reply that the theory of optimum currency areas, as economists generally think of it, is incorrect. A government, a central bank, or economists sitting in their armchairs cannot determine what an optimum currency area is, any more than they can determine the optimal type of telephone service for a country. The only way to determine an optimum currency area is to allow people freedom of choice, and then see what happens.[18] The Argentine people have shown by their preference for the dollar and for a peso with a fixed exchange rate to the dollar, that for them Argentina is part of an optimum currency area with the United States.

Still another objection is that dollarization is an inappropriate basis for a single currency in the Mercosur, because other countries, especially Brazil, will not dollarize. Again, the goal for Argentina should be the retention of political sovereignty and the enhancement of consumer sovereignty. In principle, a Mercosur monetary union would not achieve those goals, whereas dollarization would do so, in principle and in practice.

Dollarization and Financial Sophistication

Dollarization is not "too simple" for Argentina. On the contrary, the more financially sophisticated Argentina becomes, the greater the value of a simple and transparent monetary system. Central banking is central planning in money, and central planning works as poorly in money as it does in agriculture or in industry. That is why the historical performance of central banking has been much worse than the performance of market-led monetary systems, such as the currency board or dollarized systems. Inflations, devaluations, exchange controls, large fiscal deficits, and currency confiscations have been absent in those systems.

Because the currency board-like system retains some features of a central bank, the peso has experienced periodic speculative attacks. Especially during speculative attacks, interest rates in pesos have been much higher than comparable rates in dollars. We think that dollarization

would eliminate the rationale for speculative attacks. However, in a speech made last November, Alan Greenspan, chairman of the Federal Reserve System, said, "It is questionable whether a sovereign nation, otherwise inclined to economic policies that are 'off the wagon,' can force itself into 'sobriety' by dollarization."[19]

Greenspan's criticism has been repeated in the Argentine press, and Lawrence Summers, deputy secretary of the U.S. Treasury, has recently made a similar claim. It is a version of the idea that sound fiscal policies must precede a sound currency, as if the monetary system exerts no influence on government finance.

Argentines know from their own experience, though, that the monetary system does exert considerable influence. It is generally recognized that without the Convertibility Law, economic reforms in Argentina would not have progressed so far and so fast. Other countries have had similar experience. A study of 98 developing countries during the period 1950-93, for example, found that fiscal deficits were, on average, 65 percent larger and 1.4 times more variable in countries with central banks than in those with currency boards or dollarized systems.[20]

Dollarization would not absolutely guarantee sound economic policies, but no system could. The important thing is that dollarization would improve the odds that Argentina would continue to follow sound policies, much as the Convertibility Law greatly improved the odds that Argentina would implement sound policies in the first place.

In Hong Kong, some critics of dollarization have claimed that it would require huge foreign reserves beyond those necessary to convert the monetary base into U.S. dollar assets. That is incorrect. Dollarization requires only foreign reserves to cover the monetary base (M0), not reserves to cover broader measures of the money supply that include deposits at commercial banks, such as M1, M2, or M3. As in an orthodox currency board system, or in a central banking system in normal times, it is the responsibility of banks to hold reserves sufficient to meet the demands of their customers to convert deposits into notes.

Under a currency board, dollarization, and central banking alike, the reserves that banks hold in excess of legal requirements are ordinarily only a few percent of their total liabilities. Under dollarization, peso deposits would become dollar deposits of equivalent value at 1 dollar = 1 peso; they would not be converted into actual U.S.

dollar notes. Apparently, no country that has ever dollarized has done so by converting all local-currency bank deposits into U.S. dollar notes, so it is bizarre to claim that dollarization would require such an operation. Depositors would have no more reason to make mass conversions of U.S. dollar deposits into U.S. dollar notes than they now have to make mass conversions of peso deposits into peso notes. Depositors would also have no reason to switch deposits from some banks to others under dollarization. The assets and liabilities of banks would be the same as they are now. Only the unit of account would change. Expressed in terms of U.S. dollar values, nothing would change. The investment portfolios of banks, and hence their creditworthiness, would stay the same.

Critics will no doubt devise other objections to dollarization, but that is no reason for dismissing dollarization. It is possible to make objections about any monetary system. However, the true test of a monetary system is experience. There is ample historical and current experience with official and unofficial dollarization. No far-fetched conjectures are necessary. If you want to know how dollarization works, look at Panama or Puerto Rico. Dollarization works well there and elsewhere. It does not encounter the problems that critics claim would arise. Purely hypothetical objections are not sufficient to outweigh the practical success of dollarization.

Dollarization Should Take a Liberal Form

The government of Argentina is considering at least two forms of dollarization: unilateral dollarization, which can occur without a treaty, and a limited treaty under which Argentina might regain some of the seigniorage it would lose from dollarization and gain access for Argentine banks to the discount window of the Federal Reserve System as a source of liquidity.

Our own preference is for unilateral dollarization, now rather than later. The sooner the government eliminates the lingering uncertainty in the currency board-like system, the sooner interest rates can fall and the sooner Argentina's economy would benefit. Unilateral dollarization does not require the approval of the U.S. government or the involvement of the U.S. Federal Reserve System.

Argentina would need about $15 billion to replace the peso monetary base with dollars. This swap of currencies would be feasible to implement, because, in consequence of

the Convertibility Law, the central bank's liquid reserves are about $24 billion. The resulting currency swap would generate a seigniorage benefit for the U.S. government, so it is hard to understand why the United States would disapprove of dollarization in Argentina. Even if it did, however, consider that of the total supply of U.S. dollar paper money, which is about $470 billion, 50 percent to 70 percent is held outside the United States. Almost none has migrated abroad with the official approval either of the U.S. government or of the governments whose people hold the dollars. Russians, for example, have acquired more than $40 billion in dollar notes through normal channels of trade, in spite of efforts by the Russian government to discourage the holding of dollars and to prohibit their use in retail trade. Argentina could acquire U.S. dollars in a similar manner. The approval of the U.S. government would be convenient to have, but it is not essential. Even if the U.S. government actively disapproves, Argentina could still dollarize. It might have to move settlement of interbank payments from New York to someplace outside the United States, but that would create no great problems; at various times, Panama has done the same.

Dollarization may require minor changes in financial regulations, accounting rules, and so on. The government, in consultation with the financial community, could appoint a committee of experts to examine matters and make recommendations. At the current exchange rate, dollarization should create no legal problems because amounts specified in contracts would not change. Dollarization would not create any gaps in financial markets or in reference rates such as base lending rates. On the contrary, markets in dollars are much bigger and more extensive than markets in pesos, so it would be easy to find a dollar analogue for any contractual obligation in pesos.

Under unilateral dollarization it may still be possible for Argentina to negotiate a treaty under which Argentina would regain some of the seigniorage it would lose from dollarization. Even without a treaty, the loss of seigniorage would be much smaller than the potential gains from eliminating currency risk, reducing interest rates, and stimulating higher economic growth.

In our opinion, a limited treaty between Argentina and the United States that would allow Argentine banks to have access to the Federal Reserve’s discount window would be undesirable. One reason is that, contrary to what most economists think, it is undesirable to have a central bank

as a lender of last resort.[21] All the most expensive rescues of banking systems have occurred under central banking.

In developing countries, the results of the rescues have been unimpressive. Argentina, in fact, holds the record for the most expensive bank rescue in proportion to the size of its economy: The banking crisis of 1980-82 cost 55 percent of GDP. The banking system experienced another crisis in 1989-90 and another during the Tequila crisis of 1995.[22] Only during the last crisis did the government make lasting reforms to improve the banking system by liquidating poorly managed, government-owned banks. Without the Convertibility Law, which limited the ability of the central bank to act as a lender of last resort, it is doubtful that the reforms would have occurred.

Argentina already has in place a deposit insurance fund and a Contingent Repo Facility of $6.7 billion, as we have mentioned. Combined with the extensive internationalization of Argentina's banking system, making their head offices, in effect, lenders of last resort to local branches in times of need, current arrangements for emergency liquidity are adequate for the needs of a dollarized system. The experience of Panama's highly internationalized banking system has been that systemwide banking crises do not occur, because the system has access to a huge worldwide pool of liquidity in dollars. Furthermore, dollarization would not prevent the government from being a lender of last resort: the government's fiscal authorities could lend to banks directly instead of having a central bank do the job. Direct lending by the government would probably be more transparent than lending by a central bank.

Finally, we do not favor a formal treaty, because, despite the good long-term record of the dollar, there is no reason to compel Argentines to use the dollar, as a treaty might imply the government should do. The dollar can be a legal tender in Argentina without being a forced tender. Legal tender simply means that the dollar is acceptable for payments where the parties to a contract agree, and perhaps that it is acceptable if no currency is specified in a contract or an agreement. It is possible for multiple currencies to be legal tender simultaneously. All the major international currencies should have legal tender status in Argentina, and the government should consider accepting payments for taxes in euros and perhaps yen as well as dollars. (Payments would be accepted at market rates of exchange.)

Electronic payments are changing rapidly, as computers and communication become increasingly cheap. It is possible that in the future banks will develop currencies based, for example, on baskets of commodities that will be superior to currencies issued by national governments. Argentine law should not prevent people from using newly developed currencies if they wish. Under the form of dollarization we propose, the dollar would be the predominant currency in Argentina for many years, but if Argentines decide they prefer some other currency instead, they would have complete freedom to switch.

In closing this section, we are obliged to comment on the proposal to establish a Mercosur monetary union. Even if a monetary union could be established in Mercosur, we are skeptical that could ever produce a stable money of a quality equal to the dollar. Dollarization today is vastly superior to a Mercosur monetary union. Indeed, the dollar is king of the currencies and will remain so for the foreseeable future. One side of 90 percent of all the world's interbank transactions is in dollars, and about 90 percent of all the world's trade in commodities is in dollars.

Invoicing patterns for manufactured goods are a more mixed picture, but virtually all U.S. exports are priced in dollars, and an amazing 88 percent of U.S. imports are priced in dollars. In Japan, the world's second-largest economy, 36 percent of exports and 70 percent of imports are invoiced in dollars. Finally, apart from gold, about 70 percent of official reserves of foreign exchange held by non-European governments are dollar-denominated.[23]

When Mercosur countries can unilaterally unify their currencies with the dollar either by means of a currency board system or by means of official dollarization, it is hard to understand why they would even consider establishing a monetary union, a new central bank, and a new currency, the "Latino."

A Specific Proposal for Dollarizing Argentina

Official dollarization would require the monetary base (peso notes and coins, plus peso sight deposits of financial institutions with the central bank) to be swapped into U.S. dollar assets--notes, bank deposits in the United States, easily marketable assets such as U.S. Treasury bills, or some combination. Dollarization, in the rapid form that we envision, can be started immediately and largely completed within 30 days according to the steps below. A schedule of

30 days is realistic, because other countries have made more complex monetary reforms in less time.

To dollarize Argentina, the following steps should be followed:

1. Ensure that the liquid reserves of the central bank are at least equal to the monetary base. The liquid reserves are, again, the foreign reserves held against the monetary base; they exclude Argentine public bonds. As we have mentioned, in late January 1999 they exceeded the monetary base.

2. Announce that effective immediately, all peso wages, prices, assets, and liabilities are U.S. dollar wages, prices, assets, and liabilities at the rate of 1 dollar = 1 peso. No commission fees will be permitted for converting values in pesos into their equivalents in dollars. Expressed in terms of U.S. dollars, nothing will change during dollarization.

Bank deposits and loans bearing fixed interest rates will continue to bear the same interest rates until they expire, except now the principal and interest will be payable in dollars. Interest rates in dollars will probably be lower than rates were in pesos just before dollarization. Borrowers will be able to benefit from lower interest rates if they can refinance their debts; if not, they will be no worse off than they would have been under the currency board-like system, because, in terms of dollars, they will be paying equivalent amounts at the same rates of interest as they were paying in pesos.

Dollarization will cause some redistribution of income: in general, new borrowers of dollars will pay less and lenders will earn less than they do now, because they will be unable to lend in pesos. But lenders will also enjoy some benefit, because there will no longer be any possibility of a devaluation of the type that has bankrupted banks in Asia. Generally, lower interest rates will benefit Argentina's economy by enabling businesses and consumers to borrow for projects they otherwise could not undertake.

3. Immediately replace the peso with the dollar as a unit of account. Because the exchange rate is 1 to 1, no transition period is necessary. No changes in bookkeeping, computer systems, or prices on store shelves will be necessary.

4. Immediately replace peso deposits at the central bank with U.S. dollar assets. In 1995 Argentina already took a step in this direction by moving settlement of payments from peso accounts at the central bank to a dollar account at a bank in New York. This step would simply finish the process.

5. Retire peso notes and coins from circulation, the bulk of them preferably to be retired during the transition period. How quickly that can be accomplished depends on how quickly the central bank can obtain U.S. dollar notes. It is desirable to replace the bulk of peso notes during the transition period. Once retirement of peso notes begins, banks will not be allowed to charge commission fees for replacing peso notes with dollar notes. After the period for retiring peso notes from large-scale circulation is complete, banks and the government will continue for, say, five years to accept peso notes, so that holders of the notes have time to redeem them. However, old peso notes will no longer be used for hand-to-hand payments. After five years, the president of Argentina should have the power to demonetize all peso notes by decree.

We favor replacing peso notes and coins alike with dollar notes and coins, but Argentina could retain locally issued coins, as Panama does.

6. Reorganize the central bank to recognize that it no longer issues money. The central bank will cease to be an institution making monetary policy. However, it can continue to have a role in the financial system regulating financial institutions and gathering financial statistics.

Some people may think that dollarization, if adopted, should be only temporary. Historical experience, in contrast, indicates that dollarization in the form we have proposed should be permanent. We propose to continue allowing Argentines to use any currency but to prevent the government from issuing a currency again. For Argentina, a government-issued currency has always been a curse. The Convertibility Law has made the peso almost as good as the dollar, but it is still not as good. Dollarization in the form we have proposed would ensure that Argentines have the freedom to use the world's best currencies, and would make it more difficult to return to the bad old days of a bad national currency.

Appendix: A Model Dollarization Statute

The model statute is meant to suggest the main features that are desirable for a law on dollarization. Legal technicalities may require an actual statute to be somewhat different.

1. The Banco Central de la República Argentina (BCRA) shall cease to issue pesos. It shall withdraw from circulation the Argentine peso monetary base and shall replace it with U.S. dollars at the exchange rate of 1 dollar = 1 peso. The BCRA shall preferably accomplish the bulk of this task within 30 days after this law enters into force. Peso notes currently accepted for redemption into dollars shall continue to be accepted by the BCRA or the government for five years after this law enters into force. After five years, all peso notes in circulation may be demonetized by a decree of the Executive Power.

2. Wages, prices, assets, and liabilities shall be converted from pesos to U.S. dollars at the exchange rate of 1 dollar = 1 peso. By 30 days after this law enters into force, wages and prices shall cease to be quoted in pesos.

3. Interest rates and other financial ratios shall remain the same in U.S. dollars as they were in pesos. The maturities of loans and other financial obligations shall remain unchanged.

4. The Executive Power may appoint a committee of experts on technical issues connected with this law to recommend changes in regulations that may be necessary.

5. Nothing in this law shall prevent parties to a transaction from using any currency that is mutually agreeable. However, the U.S. dollar may be established as the default currency where no other currency is specified.

6. Previously enacted legislation conflicting with this law is repealed.

7. This law becomes effective immediately.

Notes

This study first appeared in Friedberg's Commodity and Currency Comments Experts' Report (Toronto: Friedberg's Commodity Management, Inc., February 1, 1999).

1. See, for instance, Miguel A. Kiguel, "A Preparation on Behalf of the Ministry of Economy, Public Works and Services of the Republic of Argentina," paper presented at the annual meeting of the International Monetary Fund, Washington, D.C., October 1998; and Banco Central de la República Argentina, Argentina and the Contingent Repo Facility (Buenos Aires: Banco Central de la República Argentina, October 1998), pp. 1-25.

2. See Steve H. Hanke, "Some Thought on Currency Boards," in Balance of Payments, Exchange Rates and Competitiveness in Transition Economies, ed. M. I. Blejer and M. Skreb (Norwell, Mass.: Kluwer Academic Press, forthcoming in 1999).

3. See Juan Moreno, "Lessons from the Monetary Experience of Panama: A Dollar Economy with Financial Integration," unpublished paper available on the World Wide Web at http://www.erols.com/kurrency/panama.html. A longer version was published in Spanish as La experiencia monetaria de Panamá: lecciones de una economía dolarizada, con una banca internacional (Panamá: Banco Central de Panamá, 1997).

4. See, for instance, Alan Walters and Steve H. Hanke, "Currency Boards," in The New Palgrave Dictionary of Money and Finance, vol. 1, ed. P. Newman, M. Milgate, and J. Eatwell (London: The Macmillan Press, 1992), pp. 558-61; and Steve H. Hanke, "A Field Report from Sarajevo and Pale," Central Banking 3, no. 3, (1997): 36-40.

5. Banco Central de la República Argentina, pp. 1-25.

6. See Hanke, "Some Thought on Currency Boards."

7. Banco Central de la República Argentina, pp. 1-25.

8. Hanke, "A Field Report from Sarajevo and Pale," pp. 36-40.

9. Adam G. Bennet, "Currency Boards: Issues and Experiences," in Frameworks for Monetary Stability: Policy Issues and Country Experiences, ed. T. J. T. Baliño and C. Cottarelli (Washington, D.C.: International Monetary Fund, 1994), p. 200.

10. Hanke, "Some Thought on Currency Boards."

11. See, for instance, Hanke, "Some Thought on Currency Boards," and Kurt Schuler, Should Developing Countries Have Central Banks? Monetary Systems and Currency Quality in 155 Countries (London: Institute of Economic Affairs, 1996).

12. See, for instance, Steve H. Hanke and Kurt Schuler, "Argentina Should Abolish Its Central Bank," Wall Street Journal, October 25, 1991, p. A15; Steve H. Hanke and Kurt Schuler, ¿Banco central o caja de conversión? (Buenos Aires: Fundación República, 1991); and Steve H. Hanke, Kurt Schuler, and Lars Jonung, Russian Currency and Finance: A Currency Board Approach to Reform (London: Routledge, 1993), pp. 72-74, 77.

13. Ken Warn, "Menem Forces Dollar Plan to Top of Political Agenda," Financial Times, January 27, 1999, p. 3.

14. See Kurt Schuler, "A Contingency Plan for Dollarizing Hong Kong," HKCER Letters no. 52 (Hong Kong: Hong Kong Centre for Economic Research, September 1998), pp. 1-20. Available on the World Wide Web at http://hku.hk/hkcer/articles/v52/
kurt.htm.

15. See, for instance, Steve H. Hanke, "How I Spent My Spring Vacation," The International Economy, July/August 1998, pp. 30-33; and Christopher L. Culp, Steve H. Hanke, and Merton Miller, "The Case for an Indonesian Currency Board, Journal of Applied Corporate Finance 11, no. 4 (1999): 57-65.

16. James Gwartney and Robert Lawson, Economic Freedom of the World 1998/1999 Interim Report (Vancouver, B.C.: The Fraser Institute, 1998), pp. 22 and 24.

17. See Hanke, "Some Thought on Currency Boards"; and Schuler, "Should Developing Countries Have Central Banks?" pp. 1-126.

18. See Lawrence H. White, "Fix or Float? The International Monetary Dilemma," in Competition and Currency: Essays on Free Banking (New York: New York University Press, 1989), pp. 137-47.

19. Alan Greenspan, "The Structure of the International Financial System," remarks at the annual meeting of the

Securities Industry Association, Boca Raton, Fla., Nov. 5, 1998. Available on the World Wide Web at: http://www.bog.frb.fed.U.S./boarddocs/speeches/1998/19981105.htm.

20. Hanke, "Some Thought on Currency Boards."

21. See George Selgin, Bank Deregulation and Monetary Order (London: Routledge, 1996), chaps. 9-12.

22. See Gerald Caprio Jr. and Daniela Klingebiel, "Bank Insolvencies: Cross-Country Experience," World Bank Policy Research Working Paper no. 1620 (July 1996), pp. 15, 26-27.

23. See Ronald McKinnon, "International Money: Dollars, Euros, or Yen?" Unpublished paper, Stanford University, December 22, 1998, pp. 1-8.

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